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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,060	11/01/2001	Michael J. Kitchin	940.02	6453

			EXAMINER
40320	7590	09/23/2004	CURCIO, JAMES A F

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WASHINGTON, DC 20005-1501

ART UNIT	PAPER NUMBER
2122	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _01 November 2001_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-14_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-14_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _01 November 2001_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a) ☐ All   b) ☐ Some * c) ☐ None of:

    1. ☐ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____.

    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
    application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-14 of application 10/016060 are pending.

Specification

1.   Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:
(1) if a machine or apparatus, its organization and operation;
(2) if an article, its method of making;
(3) if a chemical compound, its identity and use;
(4) if a mixture, its ingredients;
(5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

2.   The abstract of the disclosure is objected to because it does not contain a

concise statement directed to the entire technical disclosure. Correction is required.

See MPEP § 608.01(b).

Drawings

3.   The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

4.   For example, the specification, on pages 2-7, discloses a software algorithm for the efficient modeling of information transformation tasks of arbitrary complexity. This algorithm requires a corresponding drawing outlining the steps therein.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7.   For example, the term "familiar" in claims 1-14 is a relative term which renders the claim indefinite. The term "familiar" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Examiner interprets "familiar functional domains" to be "functional domains" for the remainder of this action.

8.   Another example is that "the information" in each of claims 4-7 and 9-14 is an

ambiguous reference and renders these claims vague and indefinite. For examples,

"the information" can refer to "information transformation tasks" in claim 1, "algorithms"

in claim 1, scripts in claim 2, "software libraries" in claim 3, etc. Examiner interprets "the

information" to refer to the "information" involved in "information transformation tasks" in

the preamble to claim 1.

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10.   Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Bowman-

Amuah (US006405364B1).

11.   As per claim 1, Bowman-Amuah discloses a method for monitoring and

controlling information transformation tasks in a software processing system (abstract;

Fig. 1 – elements 110 and 135 and associated text; Fig. 2 – elements 228, 234, 232,

230, and 236 and associated text; Fig. 2a – elements 278, 274, and 262 and associated

text; Fig. 10 – element 274, 278 and 262 and associated text; Fig. 13 –element 1300

and associated text; col. 2:17-55 (emphasis added); col. 3:34 to 9:46), the method

comprising the steps of:

Dividing software processes with familiar functional domains into normalized

groups of algorithms (abstract; Fig. 1 – elements 110 and 135 and associated text; Fig.

2 – elements 228, 234, 232, 230, and 236 and associated text; Fig. 2a – elements 278,

274, and 262 and associated text; Fig. 10 – element 274, 278 and 262 and associated

text; Fig. 13 –element 1300 and associated text; col. 2:17-55 (emphasis added); col.

3:34 to 9:46);

Encapsulating said groups with multi-modal metaphors (abstract; Fig. 1 –

elements 110 and 135 and associated text; Fig. 2 – elements 228, 234, 232, 230, and

236 and associated text; Fig. 2a – elements 278, 274, and 262 and associated text; Fig.

10 – element 274, 278 and 262 and associated text; Fig. 13 –element 1300 and

associated text; col. 2:17-55 (emphasis added); col. 3:34 to 9:46); and

Constructing multi-modal unified configuration mechanisms within each domain

of said groups (abstract; Fig. 1 – elements 110 and 135 and associated text; Fig. 2 –

elements 228, 234, 232, 230, and 236 and associated text; Fig. 2a – elements 278, 274,

and 262 and associated text; Fig. 10 – element 274, 278 and 262 and associated text;

Fig. 13 –element 1300 and associated text; col. 2:17-55 (emphasis added); col. 3:34 to

9:46).

12.   As per claim 2, Bowman-Amuah discloses binding the system together with a

scripting system (abstract; Fig. 1 – elements 110 and 135 and associated text; Fig. 2 –

elements 228, 234, 232, 230, and 236 and associated text; Fig. 2a – elements 278, 274,

and 262 and associated text; Fig. 10 – element 274, 278 and 262 and associated text;

Fig. 13 –element 1300 and associated text; col. 2:17-55 (emphasis added); col. 3:34 to

9:46).

13.   As per claim 3, Bowman-Amuah discloses extending the groups across software

libraries (abstract; Fig. 1 – elements 110 and 135 and associated text; Fig. 2 – elements

228, 234, 232, 230, and 236 and associated text; Fig. 2a – elements 278, 274, and 262

and associated text; Fig. 10 – element 274, 278 and 262 and associated text; Fig. 13 –

element 1300 and associated text; col. 2:17-55 (emphasis added); col. 3:34 to 9:46).

14.   As per claim 4, Bowman-Amuah discloses interchanging the information with

non-component software (abstract; Fig. 1 – elements 110 and 135 and associated text;

Fig. 2 – elements 228, 234, 232, 230, and 236 and associated text; Fig. 2a – elements

278, 274, and 262 and associated text; Fig. 10 – element 274, 278 and 262 and

associated text; Fig. 13 –element 1300 and associated text; col. 2:17-55 (emphasis

added); col. 3:34 to 9:46).

15.   As per claim 5, Bowman-Amuah discloses information monitored and controlled

in an information phase model comprising solid, liquid, and gaseous phases (abstract;

Fig. 1 – elements 110 and 135 and associated text; Fig. 2 – elements 228, 234, 232, 230, and 236 and associated text; Fig. 2a – elements 278, 274, and 262 and associated text; Fig. 10 – element 274, 278 and 262 and associated text; Fig. 13 –element 1300 and associated text; col. 2:17-55 (emphasis added); col. 3:34 to 9:46).

16.   As per claim 6, Bowman-Amuah discloses that the information is monitored and controlled in synchronous and/or asynchronous operations (abstract; Fig. 1 – elements 110 and 135 and associated text; Fig. 2 – elements 228, 234, 232, 230, and 236 and associated text; Fig. 2a – elements 278, 274, and 262 and associated text; Fig. 10 – element 274, 278 and 262 and associated text; Fig. 13 –element 1300 and associated text; col. 2:17-55 (emphasis added); col. 3:34 to 9:46).

17.   As per claim 7, Bowman-Amuah discloses utilizing system services tools on the information (abstract; Fig. 1 – elements 110 and 135 and associated text; Fig. 2 – elements 228, 234, 232, 230, and 236 and associated text; Fig. 2a – elements 278, 274, and 262 and associated text; Fig. 10 – element 274, 278 and 262 and associated text; Fig. 13 –element 1300 and associated text; col. 2:17-55 (emphasis added); col. 3:34 to 9:46).

Claim Rejections - 35 USC § 103

18.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19.   Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah (US006405364B1).

20.   Bowman-Amuah discloses a method for monitoring and controlling information transformation tasks in a software processing system, the method comprising the steps of dividing software processes with familiar functional domains into normalized groups of algorithms; encapsulating said groups with multi-modal metaphors; constructing multi-modal unified configuration mechanisms within each domain of said groups; binding the system together with a scripting system; and utilizing system services tools on the information (see rejections of claims 1, 2, and 7).

21.   As per claim 8, Bowman-Amuah fails to expressly disclose that the scripting system is TCL (Tool Command Language). However, official notice is taken that TCL is well known in the computer art (e.g. US 20030192030 A1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bowman-Amuah by using TCL as the scripting system. One of ordinary skill in the art would do so in order to control and monitor a system under test.

22.   As per claims 9-14 Bowman-Amuah fails to expressly disclose that the tool is any one of a value class using a unit class structure, a matrix class, a buffer class, a fraction class, or an equation processor. However, official notice is taken that value classes using unit class structures, matrix classes, buffer classes, function classes, and equation processors are well known in the computer art (e.g. Java programming language). Therefore, it would have been obvious to one of ordinary skill in the art to modify Bowman-Amuah by including a value class using a unit class structure, a matrix class, a buffer class, a fraction class, and/or an equation processor. One of ordinary skill in the art would have been motivated to do so in order to solve numerical problems and manipulate information in memory.

Conclusion

23.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

24.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Curcio whose telephone number is 703-305-8887. The examiner can normally be reached on Tuesday through Friday from 7 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam, can be reached on Tuesday through Friday from 7:30 am to

4:30 pm and on alternate Mondays from 7:30 am to 4:30 pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/17/04
JC
AU 2122

TUAN DAM
SUPERVISORY PATENT EXAMINER